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## (54) ROBOT AND GRAVITY CENTER POSITION CONTROL METHOD FOR ROBOT

(57) Abstract:

PROBLEM TO BE SOLVED: To set a gravity center position suitable for cooperative exercise of the whole body of a robot.

SOLUTION: This human type robot generally comprises lower limbs for executing leg type movement, and an upper body disposed above the lower limbs. The upper body is classified into a truck connected with the lower limbs through a hip joint, upper limbs and a head. As a driving battery for driving at least one part of the robot, a relatively heavy battery pack comprising nickel type battery cells capable of supplying inrush current of actuators is used. By installing the battery pack to the upper body, the gravity center position of the whole robot is shifted upward to regard the whole robot as an inverted pendulum, so that a dynamic walking control of the robot is easily performed. By installing the battery pack movably in the Z-axis

direction, the gravity center position adjustable to various exercise patterns can be set.

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